

IN THE SPECIFICATION:

Please amend paragraphs 28, 37, and 38 of the specification as follows:

[0028] The electric circuit 32 is electrically connected to a controller schematically illustrated at 40 in FIG. 1. As described in greater detail below, the electric circuit 32 carries electric signals generated by the vehicle occupant sensing system 28 to the controller 40. The controller 40 is electrically attached to a restraint system, schematically illustrated at 42 in FIG. 1. The restraint system 42 can be of many types, such as an air bag system, and the controller 40 controls sends output to the restraint system 42 based on the signals delivered by the electric circuit 32. Although an airbag restraint system is discussed here, one having ordinary skill in the art will recognize that the type of restraint system 42 connected to the controller 40 does not limit the scope of the present invention.

[0037] As noted above, the vehicle occupant sensing system 28 further includes at least one sensor 46. As best shown in FIGS. 2, 3A, and 3B, the sensor 46 is operatively supported by the circuit carrier 34 adjacent the sensor assembly 44. In the embodiment shown here, the sensor 46 is positioned below the base 50 of the sensor assembly 44 above one of the terminal ends 36 of the electric circuit 32. The sensor 46 can be one of many types, including but not limited to a Hall effect sensor. If the sensor 46 is a Hall effect sensor, it detects the change in magnetic flux caused by the movement of the emitter 82 within the upper slide member 52 of the sensor assembly 44, and the sensor 46 generates a signal correlative of this change in magnetic flux. In this way, the sensor 46 is adapted to detect a condition of the vehicle seat assembly 10, such as whether or not it is occupied or whether the occupant is sitting in a certain position, based on the response of the sensor assembly 44. The signals generated by the sensor 46 are carried through

the electric circuit 32 to the controller 40, which ~~uses these signals to control~~ sends output to the restraint system 42 based on the signals generated by the sensor 46.

[0038] The weight of an occupant will deform the seat cushion 16 such that the lower surface 20 of the seat cushion 16 pushes the upper slide member 52 toward the base 50. As the upper slide member 52 moves, the sensor 46 detects an increase in magnetic flux density generated by the approaching emitter 82. In this way, the sensor 46 is operable to detect movement of the upper slide member 52 toward and away from the base 50. In turn, the sensor 46 generates a responsive signal indicative of the increase in flux density, and the controller 40 ~~controls~~ sends output to the restraint system 42 based on these signals. In the preferred embodiment, the sensor assemblies 44 are of the type described in detail in applicant's co-pending patent application serial number 10/748,536, entitled "Vehicle Occupant Sensing System Having a Low Profile Sensor Assembly," and which is incorporated herein in its entirety by reference.